



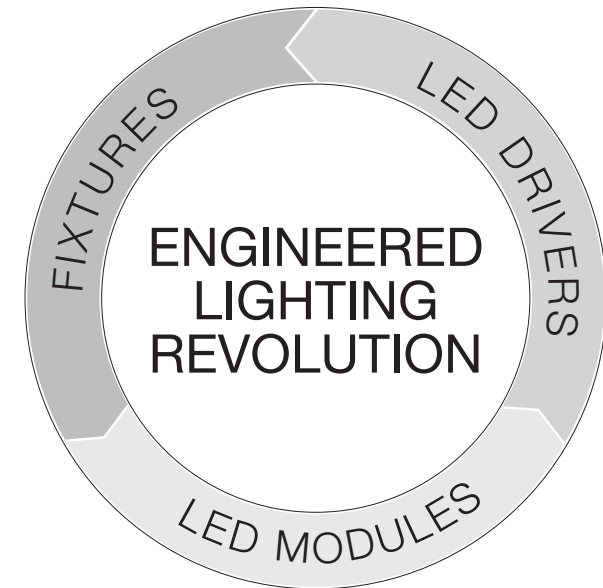
**2018**  
COMPANY PROFILE

PREMIUM LIGHTING  
SOLUTION

# ABOUT ELR

ELR or Engineered Lighting Revolution, is focused on producing premium LED lighting solutions for commercial, retail, residential and industrial. Established in 2008, we have grown substantially reaching out to different parts of the world such as United Kingdom, Australasia, Europe, Middle East, China & Hong Kong, India, Africa and South East Asia.

ELR have succeeded in designing LED products with our own key differentiators; innovative thinking and quality materials. As a company that manufactures and assembles our products, ELR have dedicated and spent many hours of R&D to ensure our products are designed for convenience and a purpose. We also ensure that our products go through a wide range of compliance and tests that meets international standards.



PROUDLY DESIGNED



UNITED  
KINGDOM

# MODULAR DESIGN CONCEPT



## UPGRADABLE LED MODULE

A modular construction of LED engines, drivers and add on accessories that ensures the future upgradability of our range of luminaires. The LED module itself is a combination of LED, optical control, thermal management and smart electronics that allows the whole unit to be changed as one simple upgrade in the future. The driver is easily connected through a simple plug-and-play connector system.

## FUTURE PROOF

*"Luminaires should allow for universal lamp/light engine replacement for serviceability, upgrade and future-proofing"*

Technologies change, but your light fixtures don't have to. ELR recognise that the latest technology now won't be in years to come. With our interchangeable LED modules and sizes that are compatible to universal lamp standards, you can keep up with the latest technologies without the need to replace your fixtures.

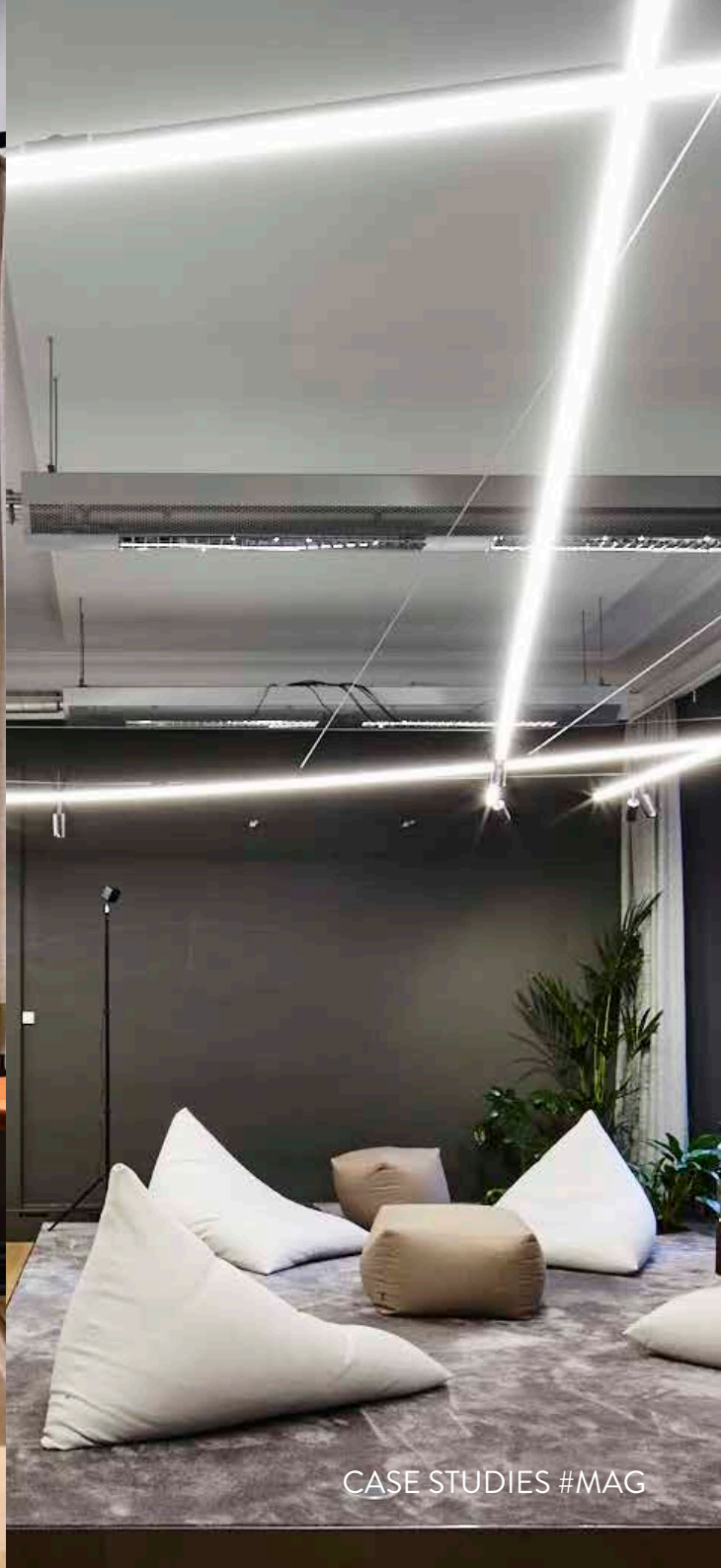
## FLEXIBLE

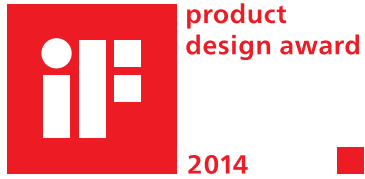
Lighting requirements may need some tweaks during or after commissioning. ELR's range of fixtures offers the unique feature of interchangeable LED modules, and the flexibility to add-on up to two layers of soft lens, anti-glare louvre or filters on site. This feature provides full flexibilities for lighting designers to optimize the required lighting effect instantly and easily.

## SERIES OF DESIGN

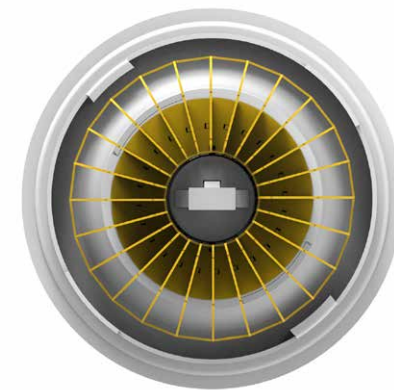
Based on concepts of homogeneity and harmony, ELR luminaires are designed to maintain their features and aesthetics throughout the adaptation of different lighting level and power requirement.







ELR modular down lights are made to suite most modern and demanding lighting applications today. Our design takes user experience into consideration and creates a system that easily allows change of power, beam distribution and tilting angle, without risk of damaging the ceiling. ELR down light fixtures are constructed with die-cast aluminium to ensure rigidity, quality and light weight. LED modules are innovatively designed to be small and light weight, but still maintaining powerful light output. All parts are combined into a complete luminaire system with simple “click-n-lock” method and also “plug-and-play” power connection for easy installation.





reddot design award  
product design 2012

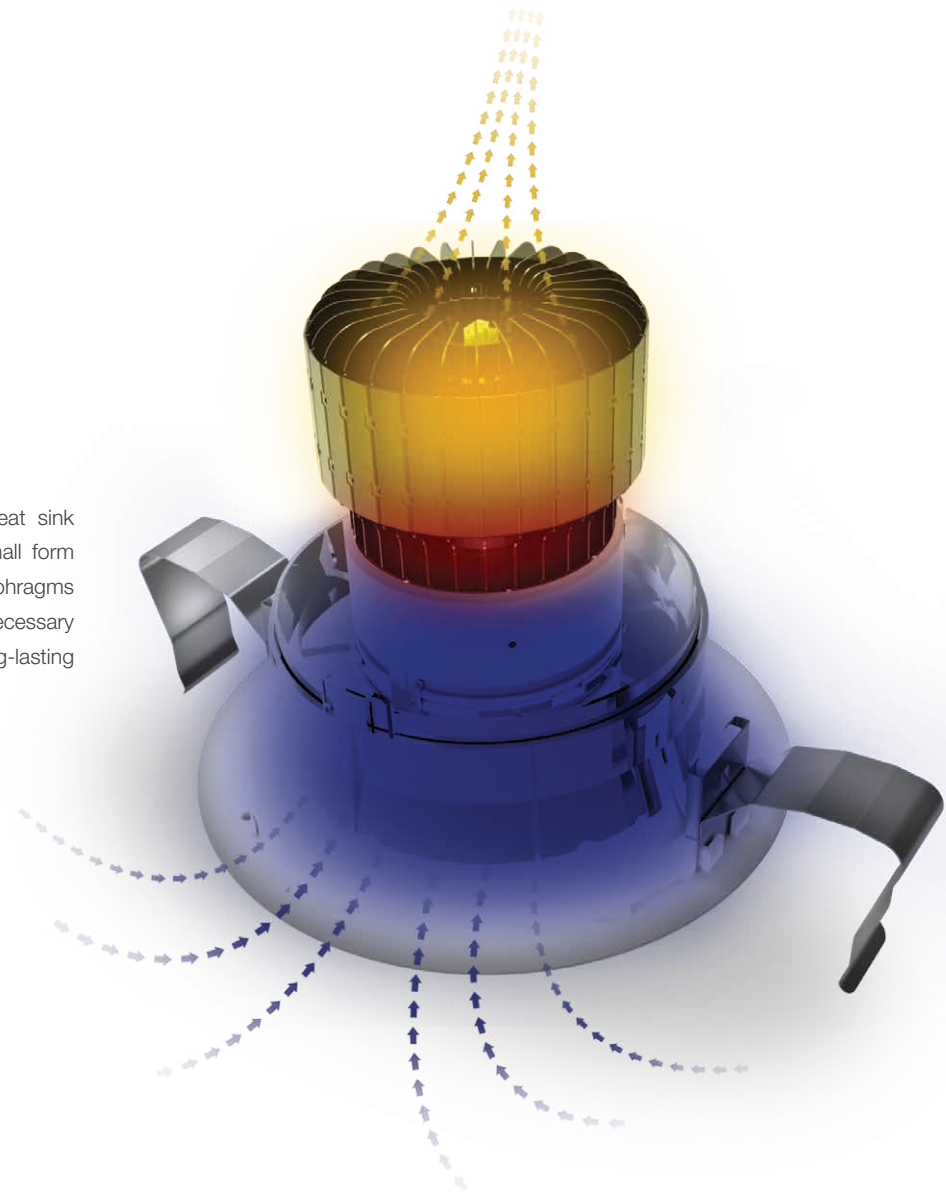
# AWARD WINNING HEAT MANAGEMENT

## HEATSINK STRUCTURE

ELR LED modules feature a sophisticated and ultra-efficient heat sink structure. The patented design requires 50% less material, making the overall LED module lighter and more efficient. The heat sink fins are manufactured from pure aluminium to maximise heat-conductivity without compromise. Our unique heat sink manufacturing method does not require casting or extruding of the aluminium, resulting no thermal coefficient losses.

## PASSIVE COOLING

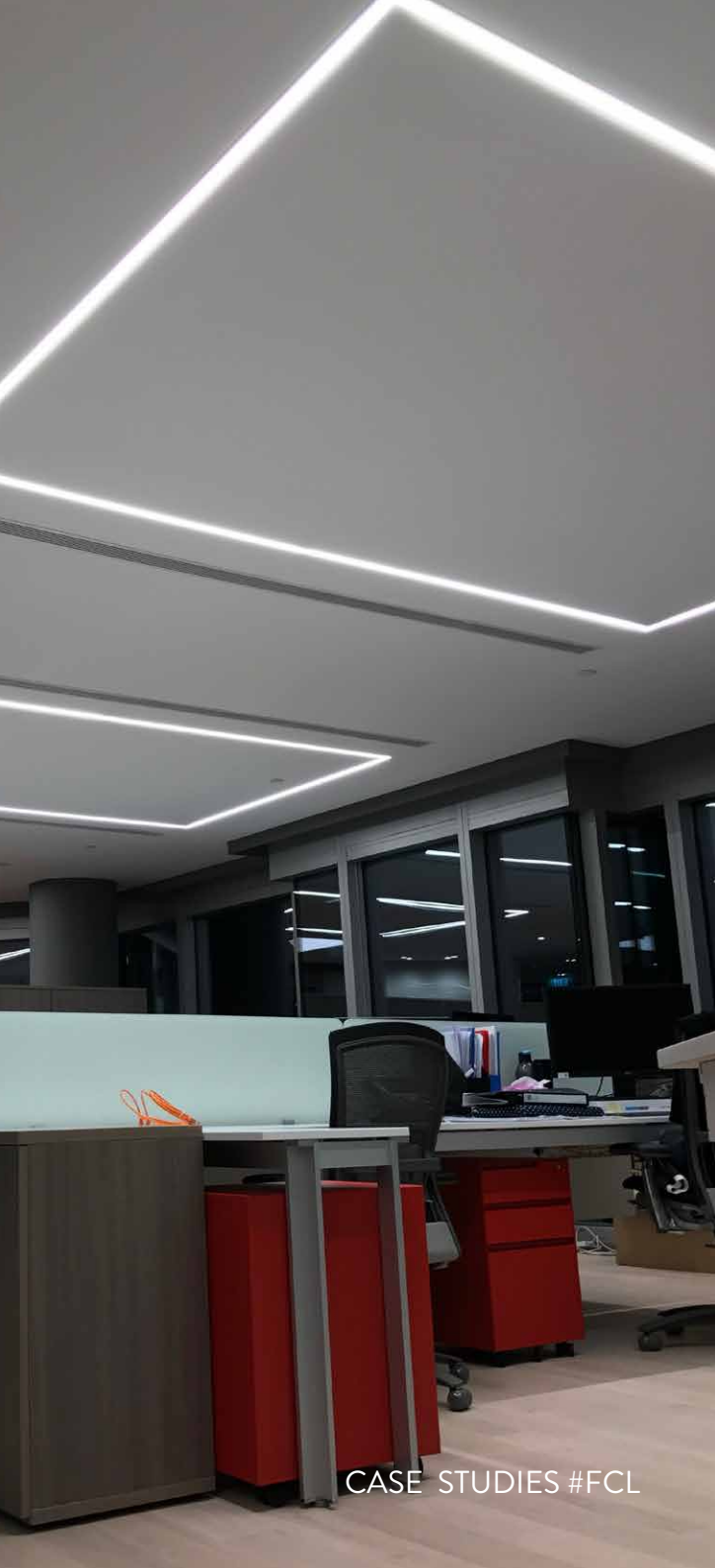
The shape and layout of ELR's innovative heat sink promotes passive, natural convection in a small form factor, eliminating the need for active fans or diaphragms that are prone to wear and making unnecessary noise. This minimalistic approach ensures long-lasting performance and reliability.



# ATePS™ ADVANCED THERMAL PROTECTION SYSTEM

ATePS™ is an intelligent combination of superior LED engine, electronics and heat management firmware. The heart of ATePS™ is ELR's proprietary thermal feedback system. In the event of abnormally high ambient temperature conditions, ATePS™ actively regulates the LED engine temperature through algorithmic fine-tuning without any user intervention, maintaining maximum possible light output without sacrificing the service life of the LED engine.







# COLOUR QUALITY



## COLOUR OPTIONS

LED modules are available in a variety of colour temperatures: warmer white with a CCT of 2200K and 2700K; warm white at 3000K; neutral white at 4000K and cool white at 5000K.

## WHITE COLOUR CONSISTENCY

Utilising advanced and systematic LED binning techniques, ELR ensure the white colour balance between LED modules, which are tightly controlled at 3-step MacAdam ellipse binning for consistent white light and aesthetically pleasing lighting effects.

## COLOUR RENDERING INDEX, CRI

Colour rendition is important to ensure faithful representation of colours. All ELR LED modules offer an excellent colour rendering index (CRI) of Ra-85, with optional further increase to Ra-95 using ProART models.

### PROART





# EFFICIENCY

## LUMEN MAINTENANCE

ELR LED modules and fittings are manufactured using only the best LED packages. All LED packages selected for use in ELR LED modules are tested in accordance with IES LM-80-2008 (“LM-80”) from accredited testing laboratories. The procedure for LM-80 involves continual measurement of the lumen maintenance for a minimum of 6000 hours. By only utilising LED packages that satisfy the requirements for lumen depreciation set out in LM-80, ELR are committing to providing the most reliable LED modules for use in our fittings.

## CLASS LEADING EFFICIENCY

With a system efficiency of more than 100 lumens/watt including electronic driver, ELR fittings are significantly more efficient than conventional luminaires. This excellent efficiency is achieved through precision design, high-grade materials and innovative technologies that are combined within the optical and thermal management system of all ELR fittings.

# BEAM ANGLE CONTROL

## OPTICS

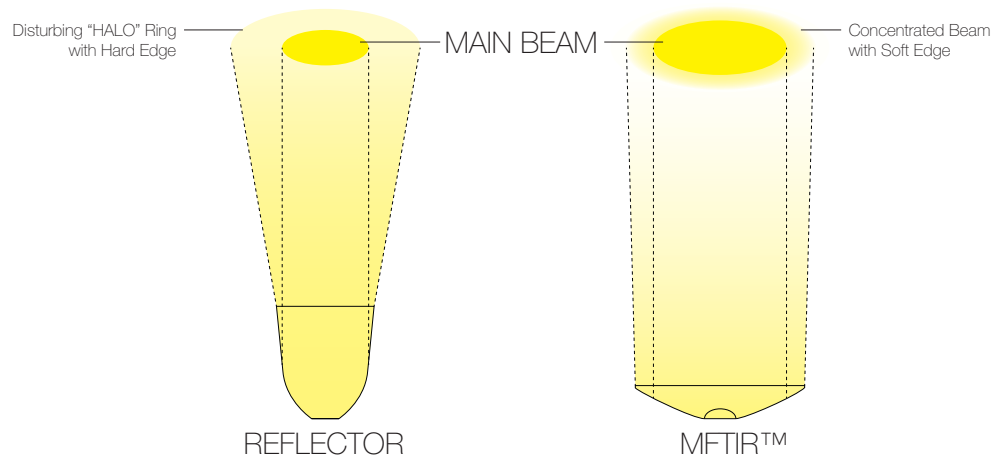
High quality optical systems are essential to provide accurate light distribution, consistent chromatic performance and maximising luminous efficacy. Optics used in all ELR LED modules are manufactured from premium grade PMMA or polycarbonate polymers that offer exceptional performance without degradation over the life of the component.

## COVERING ALL ANGLES

A range of beam angles are available to provide suitable illumination for a wide variety of applications, from variations of narrow to wide beam with excellent uniformity and rotationally symmetrical light distribution, to asymmetrical wall-washing applications.

## MFTIR™ MULTIFACETED TOTAL INTERNAL REFLECTION

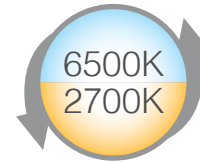
MFTIR is an excellent technique in controlling narrow beam angles with great reduction of halo around the main centre beam. The unique structure bounces light rays several times internally to produce a much more controlled light output.





# tuneWHITE™

tuneWHITE™

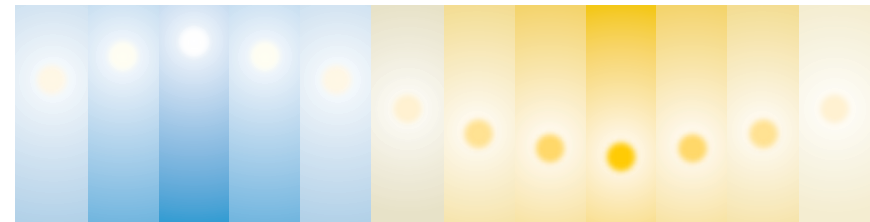


PROART



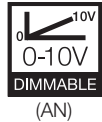
tuneWHITE™ is ELR's on-demand colour temperature adjustment system. With a tuning range from warm, halogen like 2700K through to cool 6500K, flexible room atmospheres can be easily achieved. Also with ProART CRI-95, tuneWHITE™ LED modules offer an excellent colour rendition performance.

tuneWHITE™ is interfaced to a DALI control system and is compatible with the latest DALI part 209 directive. This allows the tuning of colour temperature with a single DALI address for simplified installation and configuration.



# WARMDIM

ELR introduce an exciting upgrade to our famous LED module with the ultimate comfort of dimming, where light transform its colour in relation to dimming curve; the more the light dim, the warmer the colour shift towards the sun setting effect. The transition signals our body with the feeling towards time to relax and more comfortable mood.



The WarmDim effect has been integrated into our integrated NEST, and PRO LED modules with dimming performance to <1%. The colour rendition performance is the greatest at ProART level of CRI-95.

The WarmDim technology provides CCT tuned from warm white of 2700K or 3000K towards the warmer 1800K, and is available within 35Nest, 50Nest, 50P and 100P LED module series. Beam angle selection is from 20°, 35° and 60°.

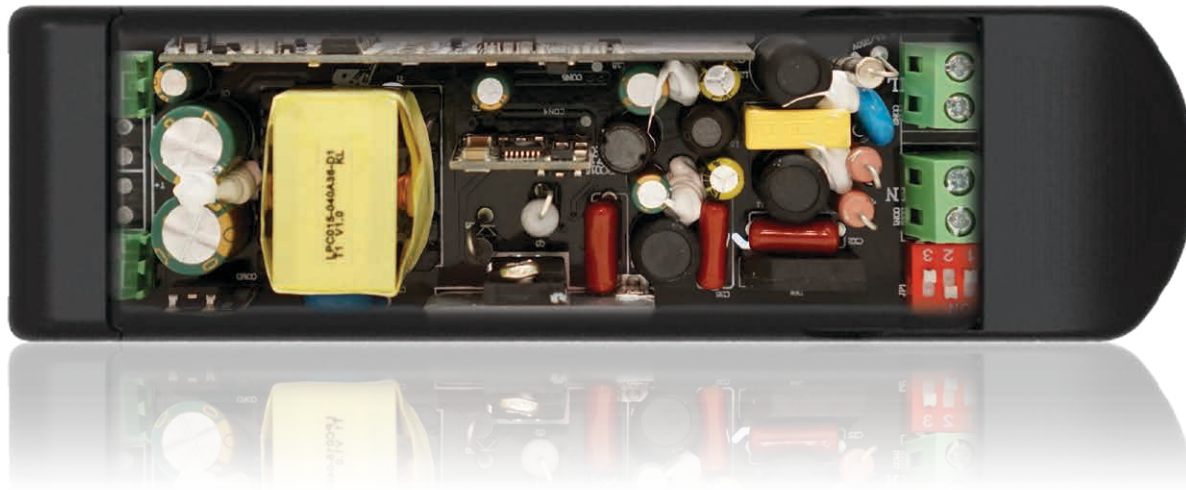
3000K  
2700K



1800K



# PERFORMANCE LED DRIVER

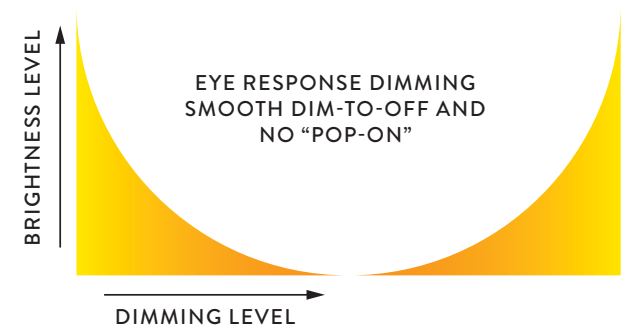


## EYE RESPONSE DIMMING

The human eye has a non-linear response to the brightness of light. The adaptation of our pupils to bright light greatly differs when being in a darker environment. It is scientifically proven that this is a logarithmically response. ELR LED drivers provide dimming curves to match the human eye response for maximum comfort and a luxurious feeling of the dimming effect.

## SMOOTH DIM-TO-OFF AND NO "POP-ON"

Our eyes are very sensitive to dark conditions; we can see objects even in dim moonlight. A slight change of brightness level in the dark can be very noticeable to the human eye. As ELR focus to provide the best comfort of light and dimming experience to our customers, our luminaires are designed to have a smooth dimming transition from 100% brightness to 0.1%, and from 0.1% smoothly dim to completely light off. Vice versa, from completely light off to on, the transition is smoothen out to light up gradually with a similar effect to sunrise. We call it the smooth dim-to-off and no "pop-on" effect.



## ComfyEYE – REDUCED FLICKER PERCENTAGE

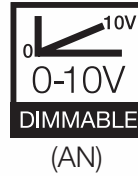
Light oscillates, but normally at very high frequencies not noticeable by the human eye. Therefore our instantaneous perception is a continuous ray of light. Just like TV or computer screens having their own defined oscillating refresh rate, otherwise known as frame rate. Nowadays with our power grid running at 50Hz or 60Hz, artificial light is prone to oscillate at 100Hz or 120Hz. Since this oscillation frequency is low, it's easier for the human eye to perceive a stroboscopic effect that may cause discomfort and health concerns to some.

In order to provide comfortable light experience, the ComfyEYE aspect embedded in ELR LED driver technology minimises light flicker percentage, which is the measurement of peak-to-peak contrast of light output. By reducing light flicker percentage below certain threshold at lower frequencies, ComfyEYE eliminates stroboscopic effect and prevents our eyes from being strained to perceive light as continuous.



## MULTIPLE DIMMING PROTOCOLS

ELR provide LED driver selections with different dimming protocols to fit different applications.



# NEST, INTEGRATION







## THE LUXURIOUS SPECTRUM OF LIGHT

As we step into the world of splendid customization, **Lustraspek** is the specialized division of ELR that provides competent service and support to tailor your infinite ideas of **custom-made lighting design/solution**. We strongly believe that our dedication to create and innovate by working closely with our clients will bring forward and materialize the exclusive designs to the world of magnificent lightings

Here, we gather **our experience and key strength** in luminaires making and take on challenges through the **commitment to supply the solutions, from concept to production**.

Let's impress the world with the **ingenious custom-made lightings** of yours.

# RESPONSIVE DESIGN TEAM

We are proud to have an **efficient team of engineers** that specialized in product and thermal design, electronic design, power supply design, and optical system design. We hold the value to continuously upgrade the competency of the team knowledge based on the latest demand and technology. **These include sensors and motorized control, and mobile Apps to further provide innovative lighting solutions.**



# ASSURED QUALITY

We have been **ISO9001 certified for 6 years, and counting.** We applied this to our standard product ranges, and now work hard to apply this knowledge to our custom build segment. All designs are to be recorded and worked with pre-plan standard operation procedure to **ensure consistency.**

# FINE FINISHING

The various options for **finishing condition** and **paint quality** play a major part in the assessment of a premium custom end product. We have a strong network of supportive painters from powder coating, hand brush finishing, and machine polishing, who enable the **customization of various color code**, to meet the prestige look of the lighting projects. We strictly ensure the finest finishing to be delivered.



# SOPHISTICATED PLATFORM

ELR specialized in **modular concept** since establishment and it is well received in the professional lighting market throughout the years. With the modular concept, we have built a solid lighting component platform with variety of **modules, drivers, and optical system**, which the technology can be easily migrate to the latest innovations and challenges.



HOTELS, RESIDENCY, RESORTS & CASINO



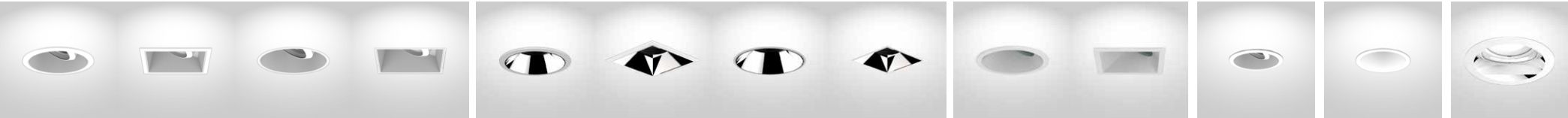
BANKS, OFFICES, RETAILS, SHOPPING MALLS



# PRODUCT OVERVIEW

## DOWNLIGHT SERIES

### REDUCED GLARE FIXTURES



VASARI SERIES

VASARI DARK LIGHT REFLECTOR SERIES

VASARI WALLWASH SERIES

VECO 3

ANTARES 3

LUCID 6 & 8

### PINHOLE FIXTURE



ALTI 3

ECLIPSE 2 SERIES

ECLIPSE 3 SERIES

CASTOR 3 MINI  
DARK LIGHT  
REFLECTOR SERIES

CASTOR 3 MINI  
SERIES

CASTOR 3 MINI  
PINHOLE SERIES

CASTOR 3 MINI  
OFFSET PINHOLE  
SERIES

CASTOR 3 DARK  
LIGHT REFLECTOR  
SERIES

CASTOR 3 SERIES

CASTOR 3 PINHOLE  
SERIES

CASTOR 3 OFFSET  
PINHOLE SERIES

### SNOOT FIXTURES



ARTIS 3 SERIES

ARTIS 4 SERIES

### BASIC FIXTURES



BASIC 3 SERIES

PIAZZO SERIES

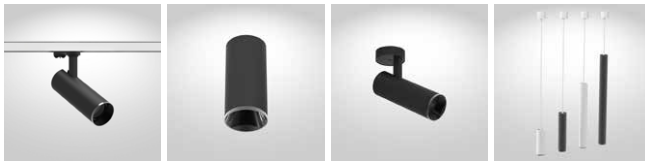
# PRODUCT OVERVIEW

## LINEAR SERIES



LYNX SERIES

## SNOOP INDOOR SERIES



SNOOP TRACK SERIES

SNOOP SURFACE SERIES

SNOOP SINGLE POINT SERIES

SNOOP PENDANT SERIES

## SNOOP OUTDOOR SERIES



SNOOP CANOPY SERIES

SNOOP WALL MOUNT SERIES

SNOOP TREE SPIKE SERIES

## FLEXIBLE STRIP



LEO FLEX



AVAILABLE FOR PROFESSIONAL LIGHTING WITH CRI 95



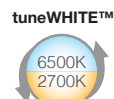
LEO FLEX WARMDIM



WARMER CCT FROM 3000K / 2700K TO 1800K WHEN DIMMED



LEO FLEX tuneWHITE™



TUNABLE WHITE RANGES FROM 2700K TO 6500K

## LED MODULES



ELR20 NEST



ELR35 NEST



ELR50 NEST



ELR35 PRO



ELR50 CLASSIC



ELR50 PRO



AVAILABLE FOR PROFESSIONAL LIGHTING WITH CRI 95



ELR100 CLO



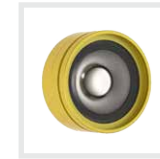
ELR100 CLASSIC



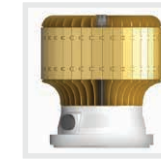
ELR100 CLE



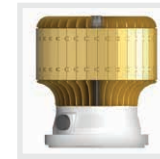
ELR100 PRO



ELR100 PLE



ELR300 PRO



ELR500 PRO



ELR35 NEST WD



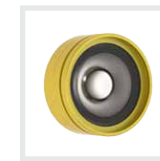
ELR50 NEST WD



ELR50 PRO WD



ELR100 PRO WD



ELR100 PLE WD



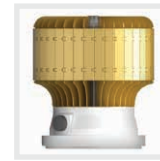
WARMER CCT FROM 3000K / 2700K TO 1800K WHEN DIMMED



ELR50 PRO TW



ELR100 PRO TW



ELR300 PRO TW

tuneWHITE™



TUNABLE WHITE RANGES FROM 2700K TO 6500K

# DEMOGRAPHICS



**BRAND OFFICE:**

*Product Conceptual Design, Specs Definition, Brand & Marketing*



**Production, R&D:**

*Design Materialisation, Research & Development, Production Control, Logistics, Warehouse*



**Sales Network:**

*UK & Europe • Middle East • China & Hong Kong • S.E. Asia • India • South Africa • Australia & New Zealand*





[www.elr-group.com](http://www.elr-group.com)